

**RESERVOIR SEDIMENT  
DATA SUMMARY**

SCS-34 Rev. 6-62

Brush Creek Reservoir  
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

19-48

DATA SHEET NO.

State of Indiana

DAM	1. OWNER <u>Muscatatuck St. School</u>			2. STREAM <u>Brush Creek</u>			3. STATE <u>Indiana</u>									
	4. SEC. <u>16</u> TWP. <u>7N</u> RANGE <u>9E</u>			5. NEAREST TOWN <u>Butlerville</u>			6. COUNTY <u>Jennings</u>									
	7. STREAM BED ELEVATION <u>683</u>			8. TOP OF DAM ELEVATION <u>730*</u>			9. SPILLWAY CREST ELEV. <u>715*</u>									
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA ACRES		13. ORIGINAL CAPACITY ACRE-FEET		14. GROSS STORAGE ACRE-FEET		15. DATE STORAGE BEGAN					
	a. MULTIPLE USE										December 1953					
	b. FLOOD CONTROL															
	c. POWER															
	d. WATER SUPPLY		<u>715</u>		<u>186.3</u>		<u>2067.4</u>		<u>2067.4</u>							
	e. IRRIGATION															
	f. CONSERVATION															
	g. SEDIMENT										July 1954					
	h. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR <u>2.8</u> MILES				AV. WIDTH OF RESERVOIR <u>0.10</u> MILES											
	18. TOTAL DRAINAGE AREA <u>13.4</u> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <u>43.94 (15yr)</u> INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA <u>13.11</u> SQ. MI.				23. MEAN ANNUAL RUNOFF <u>15.80 (14 yr.)</u> INCHES											
	20. LENGTH <u>8.3</u> MILES		AV. WIDTH <u>1.58</u> MILES		24. MEAN ANNUAL RUNOFF <u>11,290 (14 yr.)</u> AC.-FT.											
	21. MAX. ELEV. <u>930*</u>		MIN. ELEV. <u>683</u>		25. CLIMATIC CLASSIFICATION <u>Humid</u>											
SURVEY DATA	26. DATE OF SURVEY		27. PERIOD YEARS		28. ACCL. YEARS		29. TYPE OF SURVEY		30. NO. OF RANGES OR CONTOUR INT.		31. SURFACE AREA ACRES		32. CAPACITY ACRE-FEET		33. C/W RATIO AC.-FT. PER SQ. MI.	
	<u>12-53</u>		<u>-</u>		<u>-</u>		<u>-</u>		<u>-</u>		<u>186.3</u>		<u>2067.4</u>		<u>154</u>	
	<u>7-63 1/</u>		<u>9.6</u>		<u>9.6</u>		<u>Range (D)</u>		<u>22-R</u>		<u>184.2</u>		<u>1083.0</u>		<u>141</u>	
	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW ACRE-FEET			36. WATER INFL. TO DATE AC.-FT.								
			a. MEAN ANNUAL		b. MAX. ANNUAL		c. PERIOD TOTAL		a. MEAN ANNUAL		b. TOTAL TO DATE					
	<u>7-63 1/</u>		<u>43.0*</u>		<u>11,775*</u>		<u>13,928*</u>		<u>113,047*</u>		<u>13,928*</u>		<u>113,047*</u>			
	26. DATE OF SURVEY		37. PERIOD SEDIMENT DEPOSITS ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE-FEET.										
			a. PERIOD TOTAL			b. AV. ANNUAL		c. PER SQ. MI.-YEAR		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR		
	<u>7-63 1/</u>		<u>184.46</u> <u>193.29 2/</u>			<u>19.21</u> <u>20.13 2/</u>		<u>1.47</u> <u>1.54 2/</u>		<u>184.46</u> <u>193.29 2/</u>		<u>19.21</u> <u>20.13 2/</u>		<u>1.47</u> <u>1.54 2/</u>		
	26. DATE OF SURVEY		39. AV. DRY WGT. LBS. PER CU. FT.		40. SED. DEP. TONS PER SQ. MI.-YR.		41. STORAGE LOSS PCT.		42. SED. INFLOW PPM							
		a. PERIOD		b. TOTAL TO DATE		a. AV. AN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE				
<u>7-63 1/</u>		<u>48.0 (5)</u> <u>70.0 (2)</u> <u>2/</u>		<u>1,536.8</u> <u>1,643.5 *</u> <u>2/</u>		<u>0.93</u> <u>0.97</u> <u>2/</u>		<u>8.92</u> <u>9.35 2/</u>		<u>1,255*</u> <u>1,343*</u> <u>2/</u>		<u>1,255*</u> <u>1,343*</u> <u>2/</u>				

\* Assumed or estimated

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION													
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION															
7-63 <u>1/</u>	5.5	3.9	11.5	23.7	15.3	8.2	3.8	7.2	4.5	0.7					
								7.1 <u>3/</u>	6.1 <u>3/</u>	2.5 <u>3/</u>					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV. #	INFLOW AC.-FT.
1954	711.84	-	8,964*	1961	718.07	712.02	12,572*
1955	716.66	709.78	12,215*	1962	718.12	713.15	13,180*
1956	717.08	711.93	11,956*	1963	717.40	713.14	8,027*
1957	717.58	712.76	11,278*				
1958	717.07	-	13,928*				
1959	710.93	710.62	10,194*				
1960	718.89	-	10,733*				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

1/ The survey was from 5-1-63 to 9-13-63.  
2/ Includes above crest deposits.  
3/ That percentage of total deposit that is above crest.

Land Use: 48.1% Cultivated; 2.6% Idle; 17.6% Pasture; 25.9% Woods; 4.3% Lake and bottom; and, 1.5% Miscellaneous.

48. AGENCY MAKING SURVEY USGS, Indiana Flood Control and Water Resources Com, & SCS  
49. AGENCY SUPPLYING DATA SCS 50. DATE April 27, 1965